

Fifty Years of Caring for Sonoma County's Water Resources

50

*The Russian River
originates in Mendocino
County, California and
continues 110 miles
through Sonoma County
to meet the Pacific Ocean
at Jenner.*



For the past fifty years

water has been at the heart of the Sonoma County Water Agency's mission:
providing a safe, reliable supply for growing cities, towns, and agriculture; mitigating floods;
and maintaining water quantity and quality for both human consumption and wildlife.

In the Beginning - the 50s

A community that depended largely on farming for its economic livelihood, Sonoma County grew by 1920 into the nation's eighth-ranked county in agricultural production. In those early days, the majority of the county's residents lived in rural settings. As of 1947, for example, the county's population totaled about 73,000, with only 15,000 in Santa Rosa.

One reason for the success of Sonoma County's agricultural industry was available irrigation water. The Russian River, whose upper reaches slowed to a trickle in most summers, was augmented by diversions from the Eel River beginning in 1906. The increased flows were particularly important to farming in the northern reaches of the county. Residents to the south relied more on groundwater wells, but the water was of generally poor quality.

A series of winter floods between 1935 and 1945 caused \$6.1 million in damage in Sonoma County. In 1937 the Sonoma County Board of Supervisors requested that the U. S. Army Corps of Engineers study the Russian River Basin to develop a comprehensive flood control plan.

Delayed by World War II and not presented to Congress until 1949, the Corps' study identified repeated flooding and declining groundwater quality as significant threats to continued economic growth. The U.S. Army Corps recommended construction of Coyote Valley Dam on the east fork of the Russian River, just north of Ukiah, as well as additional flood control and water conservation reservoirs on Dry Creek,

Maacama Creek, Big Sulphur Creek, and other Russian River tributaries.

To implement the Corps' recommendation, Sonoma County was required to create an entity with the legal authority to enter into agreements with federal, state, and local governments. On October 1, 1949, the Sonoma County Water Agency - then known as the Sonoma County Flood Control and Water Conservation District and operating under a board of directors made up of the Sonoma County Board of Supervisors - was established.

Coyote Valley Dam was completed and dedicated in 1959, at a cost of \$5.6 million raised by bond election. The dam, creating Lake Mendocino and operated by the U.S. Army Corps of Engineers, both controls winter floods and stores 118,000 acre-feet of water.¹ The Sonoma County Water Agency and the Mendocino County Russian River Flood Control and Water Conservation Improvement District share state water rights permits to store water in the reservoir. However, as the local sponsor

An Agency Overview

The Sonoma County Water Agency is a special district — a local government entity that focuses on a limited field of activity and whose powers and duties are defined by enabling statutes.

The 1949 state law that created the Agency gives it the authority to produce and furnish surface water and groundwater for beneficial uses, control floods, generate electricity, and provide recreation in connection with its facilities. Legislation enacted in 1994 added the treatment, disposal, and reuse of wastewater to the Agency's responsibilities.

¹ An acre-foot is the amount of water required to fill one acre of land to a depth of one foot. One acre-foot supplies the annual water needs of approximately two households.

1930s-
1950s



Sonoma County experienced floods throughout the 1930s, 40s and 50s



for the construction of Coyote Dam, the Sonoma County Water Agency has the exclusive right to control releases from the water supply pool in Lake Mendocino. Once water stored in the lake reaches the flood control pool, releases are determined by the federal sponsor, the U.S. Army Corps of Engineers. As the local sponsor for the project, the Agency also assumed responsibility for maintaining channelization works on the Russian River constructed along with Coyote Valley Dam.

A New Drinking Water Supply

The bond election also provided for the construction of the Agency's water supply and transmission system. The system began simply enough — a single diversion facility, called a "Ranney collector," at Wohler Bridge, to collect water from a depth of approximately 60 feet in the gravels next to the Russian River and pump it through the Santa Rosa Aqueduct for 15.6 miles to storage tanks near Lake Ralphine in Santa Rosa. The Santa Rosa Aqueduct formed the backbone of the Agency's delivery system, with all future aqueducts connecting to it.

The Agency commenced providing water to the City of Santa Rosa on May 24, 1959, under a 1956 agreement that set the fees the city was to pay and the quantities of water the Agency was to provide. To provide sufficient revenues to expand the system, the Agency entered into similar agreements with principal

cities and water districts along the route of each ensuing aqueduct before its construction. The Petaluma Aqueduct, completed in 1962, provides water to the cities of Petaluma, Rohnert Park, Cotati, and the North Marin Water District. The Forestville Aqueduct, completed in 1962, provides water to the



Spring Lake was constructed between 1961 and 1964 as a flood control reservoir by the Sonoma County Water Agency. The project - which consists of three steel and concrete dams, spillways, channels, and flow regulators and represents one of the Agency's most ambitious flood control projects - diverts floodwaters from Spring Creek and Santa Rosa Creek into Spring Lake, alleviating much of downtown Santa Rosa's flooding. The project is designed to accommodate water equal to a 100-year flood (in other words, a storm that, based on past records, has a 1 in 100 - or 1 percent - chance of occurring in any year.) Only once since the lake's construction, in 1986, has flooding been so severe as to exceed Spring Lake's capacity.

In 1974, the Agency began plans to develop the land surrounding the reservoir into parkland. Today, Spring Lake Park is one of the most popular recreation areas in Sonoma County. The park's 320 acres accommodate a 72-acre lake, a 3-acre swimming lagoon, and miles of walking, hiking, and horseback-riding trails. The park also includes a visitors' center, campsites, picnic areas, and boating facilities. Spring Lake Park is operated by the Sonoma County Regional Parks Department under a contract with the Sonoma County Water Agency.

1949



The Sonoma County Water Agency was created as a special district by the California legislature

1959



Coyote Valley Dam completed with storage capacity in Lake Mendocino of 118,000 acre-feet

Forestville Water District; and the Sonoma Aqueduct, completed in 1965, to the City of Sonoma and the Valley of the Moon Water District.

Managing the Floodwaters - the 60s

Flood control continued to be an important aspect of the Agency's work, particularly after large areas in Sonoma County were inundated repeatedly in the mid-1950s. The Agency again requested the U.S. Army Corps of Engineers survey the Russian River basin to evaluate flood control and water resources in the region. To provide financing for flood management projects, the Board of Directors in 1958 proposed the creation of nine flood control zones, each encompassing a major watershed, which could be activated at the request of 25 percent of the property owners within its boundaries to allow assessments for flood control projects. Today, six of the nine zones are funded. Activation of Zone 1A led to channel improvements in the Laguna de Santa Rosa, a natural waterway and overflow basin flowing to Mark West Creek and ultimately the Russian River. The Laguna de Santa Rosa was once very

Flood Control

The Agency maintains over 300 miles of creek channels. Thousands of native trees and shrubs have been planted along channel banks with the help of Sonoma County Releaf and local school children to mitigate vegetation lost due to channel clearing, construction, and development in the area.

effective at reducing flooding on the lower Russian River, but silt and debris, as well as encroaching development, have begun to reduce its capacity.

Additional structures, known collectively as the Central Sonoma Watershed Project and aimed at preventing flooding in Santa Rosa, were planned for other tributaries to the Russian River. This project includes five water diversion structures built in the late 1960s on Santa Rosa Creek, Matanzas Creek, Paulin Creek, Brush Creek, and Spring Creek.

In 1962, following the second survey report by the U.S. Army Corps of Engineers, Congress authorized a flood control structure and reservoir with recreational facilities on Dry Creek, a major tributary to the Russian River, near Cloverdale. Called Warm Springs Dam, the project was designed to provide

212,000 acre-feet of water supply storage and 130,000 acre-feet of flood control storage in a reservoir to be known as Lake Sonoma.

Warm Springs Dam proved to be very controversial. Design and construction were suspended several times by litigation over financing and environmental effects, and ballot initiatives to halt the dam were presented to voters - and defeated - on three occasions. In 1983, more than four decades after the Corps' initial 1937 survey, Lake Sonoma began storing water.

Meeting a Growing Community's Water Needs - the 70s

New freeways and commuter routes to San Francisco and Oakland, combined with the building and baby booms following World War II, drew businesses and families to Sonoma County. The demand for water grew apace. In the

1959



The first two Ranney water collectors were built along the Russian River near the Wohler Bridge



The Santa Rosa aqueduct was built, with delivery of water to the City of Santa Rosa commencing on May 24, 1959

first year of operation for the Santa Rosa Aqueduct, 1959/60, the Agency pumped a little over 6,000 acre feet of water. By the end of the decade, with an additional Ranney collector and expanded aqueduct system, the Agency was delivering 18,000 acre-feet of water annually, a threefold increase in only 10 years, and the system was stretched to its limit. The Agency was faced with meeting demands that the existing system could not accommodate.

The contracting communities needed assurances of a continued water supply. To provide for those needs, the Agency proposed the Russian River to Cotati Intertie Project. The project was conducted with the authority the Agency was given in the 1974 Agreement for Water Supply with the goal of continuing to provide water supplies for the contracting communities - or water contractors, as they are known - through the year 2000.

The 1974 Agreement for Water Supply obligated the Agency to operate, maintain, and expand the water supply and transmission system. Expansion included the intertie pipeline from the Russian River to Cotati, additional diversion facilities at the Russian River, an inflatable dam at the diversion site to fill infiltration ponds, booster pumps, storage tanks, emergency wells, a hydro-electric plant at Warm Springs Dam, corrosion control facilities, a water quality "early warning" system, and computerized telemetry systems. The 1974 Agreement for Water Supply fixed the amount of water to be delivered to the water contractors based on their own estimated needs. The signatories to the 1974 Agreement for Water Supply were the cities of Santa Rosa, Petaluma, Rohnert Park, Sonoma, and Cotati; North Marin Water District; Valley of the Moon Water District; and Forestville Water District.

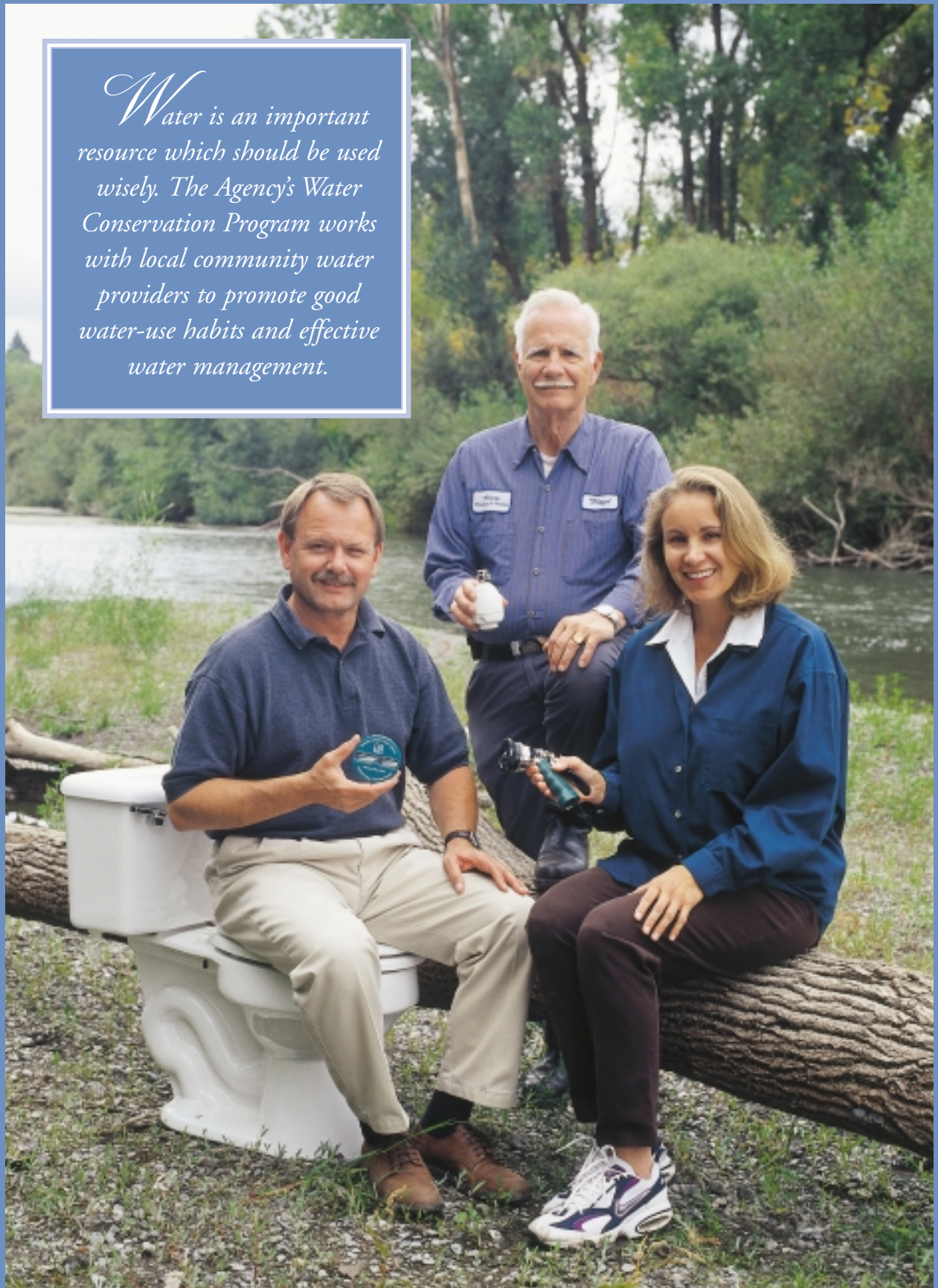
An additional feature of the 1974 Agreement for Water Supply was the formation of the Water Advisory Committee. The committee includes representatives from each of the eight signatories to the 1974 Agreement for

Water Rights

Riparian water rights entitle the owner of land containing or abutting a natural stream the right to use natural flows by direct diversions for beneficial purposes without a permit. If water is to be stored for use in another season, owners must obtain an appropriative water rights permit. As early as 1954, the Sonoma County Water Agency applied to the State Water Resources Control Board, which has the authority over water rights, for rights to appropriate Russian River water. As the local project sponsor for the construction of the Coyote Valley and Warm Springs dams, the Agency retains rights to some of the water stored in these reservoirs and controls the releases from the reservoirs' water supply pools. The Agency also has rights for direct diversion and redirection of water at the Wohler and Mirabel collectors. The Agency is required to maintain minimum streamflows at various points on the Russian River and Dry Creek in accordance with its water rights permits.

In addition to its water rights permits, the Agency operates under a water supply permit issued by the State Department of Health Services. This permit requires the Agency to operate and maintain its water supply system in compliance with state water law. This permit includes water quality monitoring requirements and various other conditions and criteria. The Agency consistently meets state and national standards for drinking water quality.

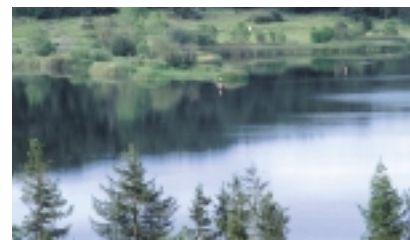
Water is an important resource which should be used wisely. The Agency's Water Conservation Program works with local community water providers to promote good water-use habits and effective water management.



Late 60s



Construction of Spring Lake Dam



A view of Spring Lake

Five water diversion structures were built as part of the Central Sonoma Watershed Project

Water Supply and makes recommendations to the Agency's Board of Directors on water supply and policy issues.

The Agreement for Water Supply has been amended 10 times since 1974. The Marin Municipal Water District has also executed two agreements with the Agency for water supply contingent upon the entitlements of the water contractors being met.

Conservation and Environmental Law, A New Era for the 70s and 80s

The severe droughts of the mid-1970s demonstrated the need to use the water we have more effectively. In 1976-1977, Sonoma County experienced some of the driest water years on record. As a result, the combined water storage levels of Lake Mendocino and Lake Pillsbury (Lake Sonoma had yet to be completed) were depleted to abnormally low levels,

prompting requests for the Agency's water customers to adopt voluntary water conservation and rationing measures, and local towns and cities shared water resources in an effort to maximize the region's water supply. The Agency drilled several emergency wells in the Santa Rosa Plain to supplement the reduced flows in the Russian River.

In 1981 the Agency launched a water conservation program that focused on



Panelists at the 1998 Russian River Symposium



Public Policy Facilitating Committee tour

The Sonoma County Water Agency works regularly with local, state, and federal legislators, regulatory agencies, and environmental and citizen groups to coordinate Agency activities and goals. Planning for several recent improvement projects for some of the sanitation districts and zones has been facilitated by the formation of citizen advisory committees. The committees are comprised of property and business owners within the districts and zones who meet regularly with Agency staff to assist with developing community outreach, design and planning.

In 1998, the Sonoma County Water Agency sponsored the Russian River Symposium in an effort to encourage communication, cooperation, and coordination among interested parties and stakeholders in the Russian River Watershed. The symposium attracted a broad representation of the community to three days of conference sessions, tours, and exhibits.

A Public Policy Facilitating Committee has been formed to share information on the Agency's Memorandum of Understanding with the National Marine Fisheries Service and the U.S. Army Corps of Engineers, and to receive public input via periodic open workshops.

1974

- New environmental laws:
- National Environmental Policy Act
- California Environmental Quality Act
- California Porter-Cologne Act
- Clean Water Act
- Federal Endangered Species Act
- Safe Drinking Water Act
- Water Supply Agreement



Aqueduct Construction

1981

- The water conservation program, including outreach to schools and the landscape industry, was launched

distributing free water conservation booklets, bumper stickers, and pencils with the message “use water wisely” to teachers and students of schools in Sonoma and northern Marin counties. Other programs targeted the landscaping industry, developed water auditing and leak detection programs, and used the Sonoma County Fair to promote conservation.

In 1985, the Agency developed its first Urban Water Management Plan, which is updated approximately every five years, most recently in 1996, with the next plan to be adopted in December 2000. The plan estimates past, current, and projected water use; describes available conservation measures, including their cost-effectiveness and environmental and other effects; schedules implementation of proposed conservation measures; and estimates the frequency and magnitude of droughts and water supply emergencies. The plan also includes an evaluation of water reclamation possibilities, opportunities for water transfers or exchanges, conservation incentives, and public outreach or educational programs.

Ensuring a Safe, Reliable Water Supply with Environmental Integrity

As early as 1962, the Sonoma County Water Agency began addressing fisheries issues along the Russian River. “Roiling,” or “stirred-up” water, was a frequent concern, since disturbed silt and debris in the river damaged habitat. The Agency consulted often with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and the California Department of Fish and Game to determine the causes of roiling and establish corrective practices.

Consultations with federal and state regulatory agencies became more frequent in the 1970s with the enactment of several groundbreaking environmental laws. The National Environmental Policy Act of 1969, the California Environmental Quality Act of 1970, the California Porter-Cologne Act of 1969, the Federal Clean Water Act of 1974, the Federal Endangered Species Act of 1973, and the Safe Drinking Water Act of 1974 formalized the Agency’s consideration of both the environmental effects of its service obligations and the federal and state guidelines intended to protect water quality. In 1974 the Agency hired its first

environmental specialist to prepare environmental documentation, studies, and reports required by law.

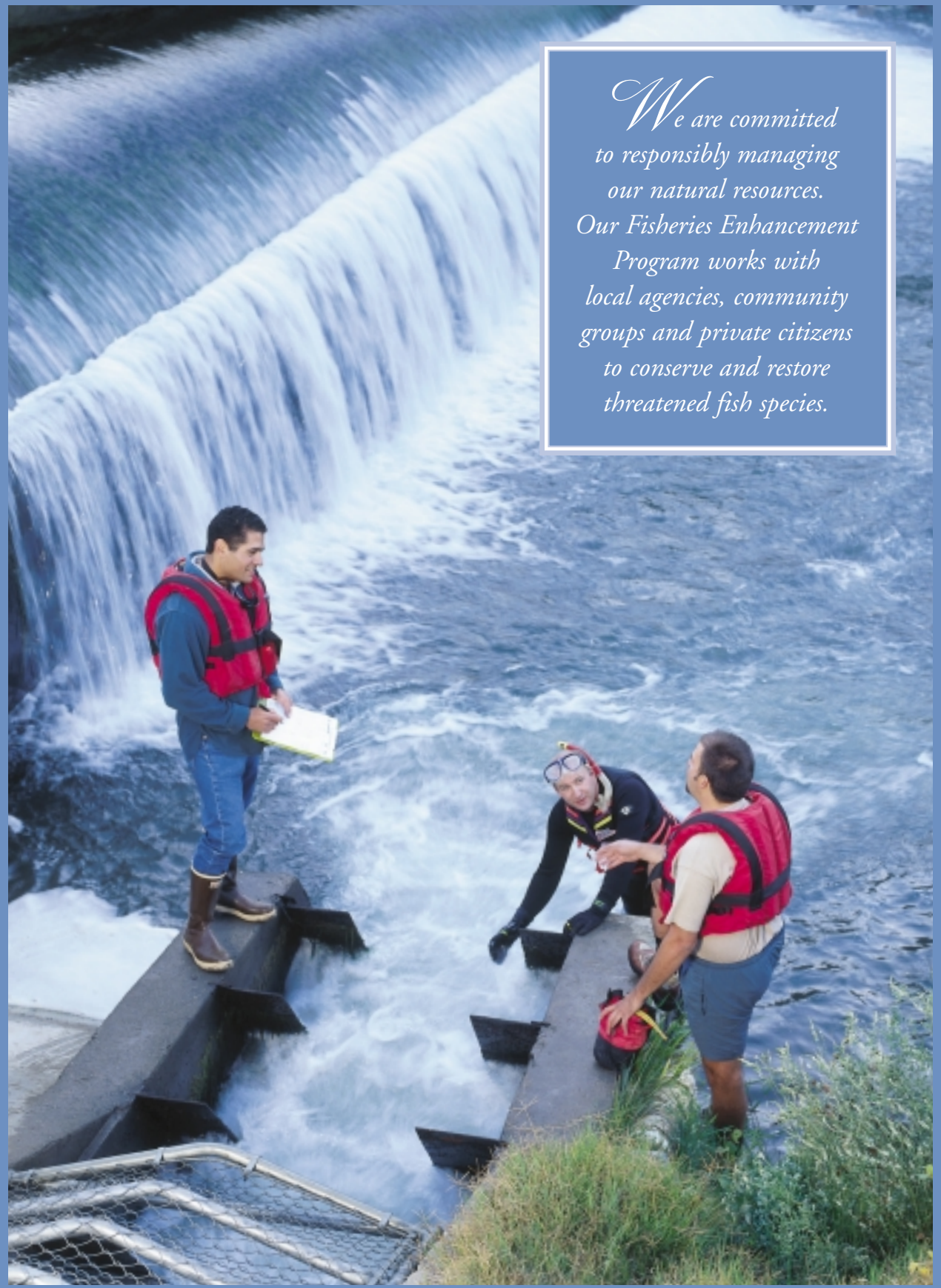
In 1986 the operation of Lake Sonoma and Lake Mendocino changed to accommodate the State Water Resources Control Board’s Decision 1610, which established minimum in-stream flows for Dry Creek and the Russian River downstream of Lake Mendocino. These flows are designed to support recreation, fish and wildlife, and other beneficial uses of the Russian River.

Water Management - Facing the Challenges of the 90s

By 1995, with concerns for the health of the Russian River mounting and the community demanding a closer look at the effects of all of the river’s diverse uses, the Agency began to facilitate communication with regulatory agencies and environmental groups envisioning improved coordination and collaboration and, in turn, improved management of the Russian River watershed.

In 1995, the Agency hired a fisheries biologist and established the Fisheries Enhancement Program as part of the

*We are committed
to responsibly managing
our natural resources.
Our Fisheries Enhancement
Program works with
local agencies, community
groups and private citizens
to conserve and restore
threatened fish species.*



1983



Lake Sonoma began storing water

1985



First Urban Water Management Plan

1986

Releases from Lake Sonoma and Lake Mendocino revised to accommodate recreation, fish and wildlife, and other beneficial uses of the Russian River

Natural Resources Section at the Agency. This program develops a work plan each year after requesting proposals from public agencies, community groups, and private citizens for a wide range of activities, including habitat surveys, water quality assessments, habitat restoration, fish ladder design, and community creek clean-up events. The program has also sponsored significant research to address long-term issues surrounding fisheries, including the genetic profiling of coho salmon in the Russian River and other coastal watersheds and the monitoring of salmonid populations.

Breaching of the estuary sandbar where the Russian River empties into the Pacific Ocean is managed by the Agency's Natural Resources staff. The estuary closes periodically when a sandbar forms naturally across its mouth. When the estuary closes, its water quality degrades and localized flooding can occur. Once flooding of low-lying areas begins, the sandbar has to be breached artificially. To protect the ecological system within the estuary, the Agency follows specific recommendations under the Estuary Management Plan and five federal and

state permits for breaching the sandbar.

Wildlife biologists and wetland ecologists in the Agency's Natural Resources Section also work with staff in other Agency divisions to responsibly manage the natural resources on Agency owned or operated properties.

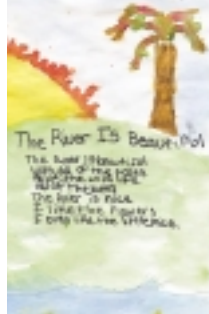
In August 1996, the Agency published *The Russian River, An Assessment of Its Condition and Governmental Oversight*, which examined water supply, water quality, recreation and public access, gravel mining, anadromous and warm-water fisheries, potential barriers to fish migration, riparian habitat, and flood and erosion control activities. This report has proved instrumental in defining new state and federal legislation, developing comprehensive planning efforts, identifying problems, and establishing the jurisdictions and expertise of various local, state, and federal agencies in managing the Russian River.

Soon after publication of the assessment, the Board of Directors authorized the Agency to promote coordination, communication, and cooperation among all state, local, tribal, and federal agencies with interests and responsibilities in the

Russian River and its tributaries. Since then, the Agency has undertaken a number of important initiatives, including publishing the Russian River Bulletin, sponsoring a symposium on the Russian River, preparing a comprehensive status report on the river's condition every five years (the next is due in 2001), and assessing resource needs and restoration opportunities in the Russian River region. In addition, the Agency has entered into an agreement with a local resource conservation district to coordinate watershed stewardship activities and to provide technical assistance and financial support in that effort.

The Agency is also lending administrative support to the California Resources Agency and the U.S. Army Corps of Engineers for the Russian River Watershed Council. This council comprises the public and private landowners who represent varied interests and responsibilities within the Russian River basin. The council is working toward ensuring the recovery of the river's wild anadromous fishery to a healthy and sustainable level; developing a strong, healthy, and diverse economy; and promoting stewardship of the

1993



Developed a comprehensive Water Education Program

1995



Hired a fisheries biologist and established a Fisheries Enhancement Program and Natural Resources Section



Russian River and its watershed by informing and engaging the citizenry.

Agency and Community, Working Together to Manage Our Resources

The listing of Central-Coast coho and chinook salmon and steelhead trout as threatened species under the Endangered Species Act is having a major, but not yet fully defined, effect on the Agency's operations. To benefit fisheries, the Agency has partnered with the North Coast Regional Water Quality Control Board to establish water quality standards, identify and prioritize projects to improve water quality, establish water quality monitoring protocols, and track all water quality enhancement and mitigation projects.

The Agency continues to advocate for best management practices that serve the needs of the environment in water supply, conservation, sanitation, and flood control, and is a leader for the restoration of fisheries and wildlife habitat. Recently, for example, the Agency finalized a Memorandum of Understanding (MOU) with the National Marine Fisheries Service and

the U.S. Army Corps of Engineers to address Corps and Agency operations that may affect coho and chinook salmon and steelhead. As part of the MOU, a Public Policy Facilitation Committee was established to share information on the process and to receive public input via periodic open workshops.

At the regional level, the Agency is working closely with nongovernmental organizations, landowners, private philanthropic organizations, and government agencies to develop federal and state funding for restoration of the San Pablo Bay watershed. The watershed, which covers 810 square miles in Marin, Sonoma, Napa, Solano, and Contra Costa counties, includes the largest expanse of tidal wetlands left in California. Beginning in 1994, state and federal agencies acquired more than 30,000 acres of former wetlands that had been reclaimed for agriculture or salt ponds and began to restore them. The Agency envisions providing recycled water to help in the restoration. This effort will benefit a number of threatened species, including delta smelt, Sacramento splittail,

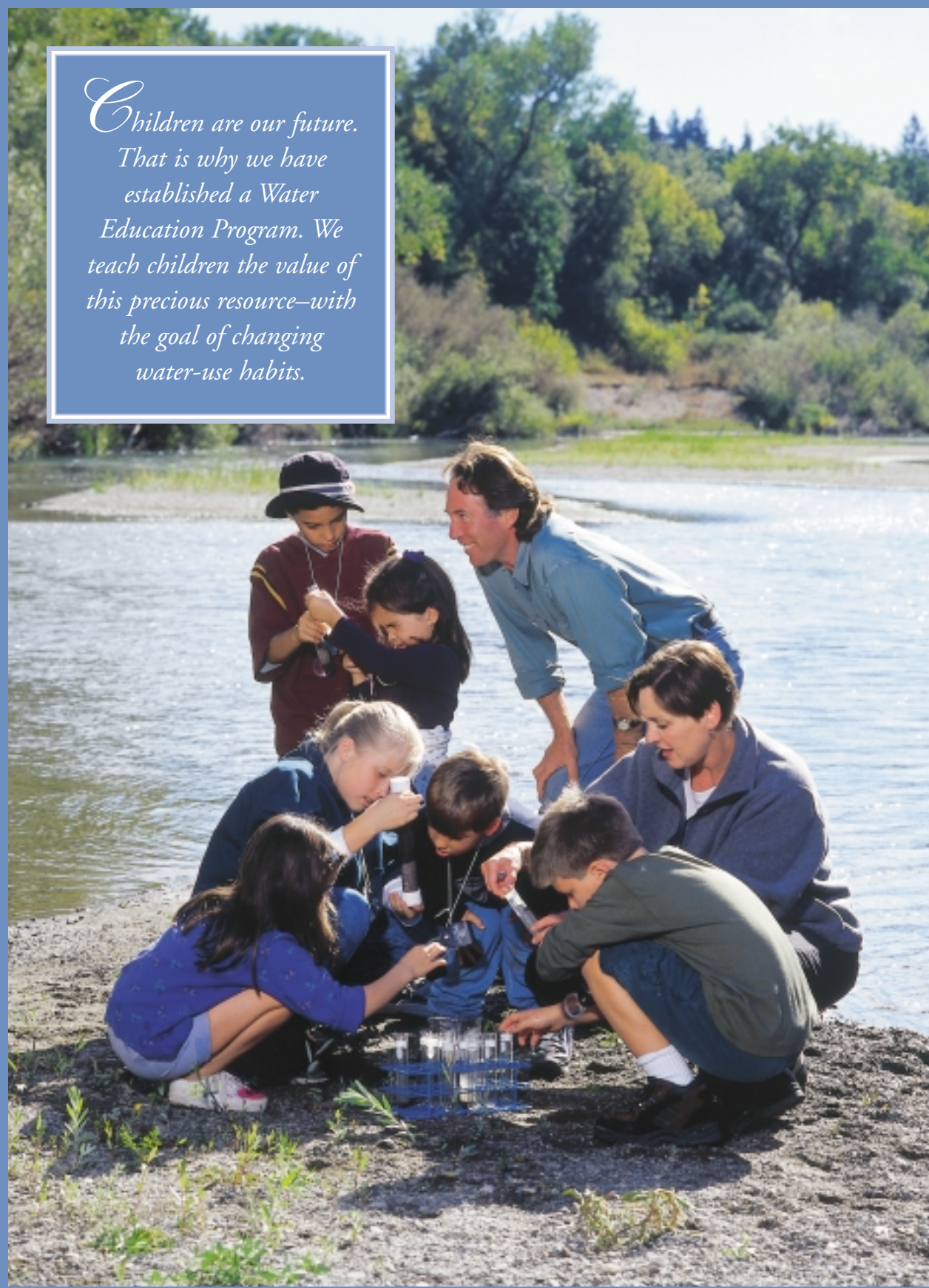
chinook salmon, and the salt marsh harvest mouse, as well as many other estuarine species.

On a larger scale yet, the Agency is a leader in the Pacific Coastal Salmonid Conservation and Recovery Initiative, a multi-state effort begun in 1998 by representatives from King County, Washington, the City of Portland, Oregon, and Sonoma County. As a result of coordinated legislative outreach efforts, the final federal budget for fiscal year 2000 established the Pacific Coastal Salmon Recovery Fund with \$78 million allocated for distribution among California, Oregon, Washington, Alaska, and three tribal and fishing treaty parties. It is hoped that the initiative will, at a minimum, continue as a six-year funding cycle. The federal funds, which are to be matched by state or local contributions, will help restore historic runs of wild salmon and steelhead.

Education - Teaching the Value of Water

By 1994, the Agency had developed a comprehensive Water Education Program that includes instruction on water's

*Children are our future.
That is why we have
established a Water
Education Program. We
teach children the value of
this precious resource—with
the goal of changing
water-use habits.*



1995



Assumed responsibility for managing 11 sanitation zones and districts



1996



Began to evaluate the potential for using recycled water in irrigation

physical properties, the dependence of all life on water, and the importance of personal responsibility for stewardship of the watershed - all with an eye to changing the water use habits of students and their families. This program is open to K-6 classes in public and private schools located within the service areas of the Agency's contractors in Sonoma and northern Marin Counties. The program also supports teacher trainings, workshops, free curriculum, a lending library, and community outreach events.

In 1996, the education program introduced a pilot project called the Russian River Watershed Education for Conservation Program, utilizing the Agency's 140-acre field study site at the Russian River, where students learn firsthand the importance of watershed stewardship and water conservation. The field study component is now fully implemented and is offered in addition to the classroom instruction component.

Making the Most of Our Water

Adopted in June 1999, the Agency's Water Conservation Plan is designed to implement cost-effective water

conservation measures with the goal of saving 6,600 acre-feet of water each year. The plan allocates \$15 million to water conservation programs over the next 10 years, with some of the money going directly to assist the water contractors in implementing water conservation measures in their service areas. So far, the Agency has paid for over 100,000 free water-conserving shower heads and faucet aerators, retrofitting of 33,000 toilets to low flow, and 1,200 rebates for horizontal-axis, water-efficient washing machines.

During a restructuring of the county government in 1995, the Agency assumed responsibility for managing the county's 11 sanitation zones and districts, which provide wastewater treatment, reclamation, and disposal for approximately 22,000 residences and businesses. Since some of the wastewater treatment plants have not been significantly improved in over 20 years, capital projects are needed to ensure compliance with state and federal treatment and discharge requirements. Each sanitation district and zone operates under unique, individual permits from the California

State Regional Water Quality Control Board (San Francisco and North Coast regions) that sets the requirements for operation.

In 1996, the Agency began to evaluate the potential for using recycled water in irrigation. The Agency has worked closely with agricultural and environmental groups, cities, towns, and districts to evaluate the potential for a recycled water distribution system that would link the reclamation systems operated by four municipalities and two sanitation districts. These facilities currently produce between 30,000 and 40,000 acre-feet of recycled water per year, a significant source for agricultural and municipal use. Of this, approximately 15,000 acre-feet are reused for urban and agricultural irrigation, with the remainder discharged during the winter into the Petaluma River, San Pablo Bay, or the Russian River and its tributaries. With the proposed construction of additional reservoirs, recycled water could instead be stored and used for agricultural and municipal irrigation, thereby reducing demand on the overall water supply system, enhancing the quality of surface

1998

Pacific Coastal Salmonid
Conservation and Recovery
Initiative begun

Water Supply and Transmission
System Project approved

Established Endangered Species
Act Compliance Section

1999



Coho and chinook salmon and steelhead listed as
threatened under the Federal Endangered Species Act

Adopted a specific Water Conservation Plan with goal
of saving 6,600 acre-feet of water per year

waters, and contributing to the recovery of threatened fish and wildlife.

A Vision for the Future

The Sonoma County Water Agency enters the new millennium facing numerous challenges and demands.

At the request of its water contractors, the Agency proposed the Water Supply and Transmission System Project to develop additional supply and expand the existing transmission system in an effort to meet the contractors' needs under their existing general plans. The project has been the subject of litigation since its approval in December 1998.

In February 1999, the Federal Energy Regulatory Commission (FERC) issued a draft environmental impact statement to reconsider minimum stream flows in the Eel River at the Potter Valley Project in Lake and Mendocino counties, which is operated by PG&E. The minimum flows are designed to protect anadromous salmon and steelhead in the upper Eel River. Any increase in minimum Eel River flows could reduce diversions into the Russian River. In drought years,

under the Agency's existing water rights requirements, such changes would require additional releases from Lake Mendocino and Lake Sonoma, potentially draining the former and affecting storage in the latter, affecting habitat on the Russian River, and further straining the Agency's water supply and transmission system.

In September 1999, PG&E proposed a sale of the Potter Valley Project as a part of a larger divestiture of hydroelectric facilities. The proposed sale requires the approval of various regulatory agencies. The Agency is participating in the administrative process to ensure that Russian River water supply and environmental interests are considered and protected in connection with PG&E's proposed sale.

The Agency continues to explore new water sources. Planned studies will determine the viability of groundwater supplies in the Santa Rosa Plain and the feasibility of surface water treatment. The Board of Directors has also approved a pilot program to evaluate advanced wastewater treatment technologies, including indirect potable reuse.

With the cost of construction and

improvement projects ever increasing, financial assistance is necessary to reduce the burden on sanitation districts, ratepayers, property owners, and water consumers. Support is also sought for environmental and fisheries enhancement, including numerous projects to benefit salmonid populations and habitat. The Agency will continue to pursue legislation and funding opportunities for federal and state assistance.

Improvement projects are planned for some of the sanitation districts and zones managed by the Agency. As water becomes more scarce in California, reclaimed water will become a valuable commodity for irrigation and other uses.

As the Sonoma County Water Agency prepares for the new millennium, we are uniquely aware of our important responsibility in protecting, maintaining, and using the area's water resources. We will continue to work in a proactive manner that emphasizes the health and preservation of the environment and builds on outreach to, and involvement with, all of Sonoma County's various communities and constituencies.

	Flood Related Projects	Water Supply Efforts	Conservation Efforts	Sanitation Projects
1940s County Population 69,052	Floods of the 1930s, '40s and '50s The Sonoma County Water Agency came into existence			
1950s County Population 103,405	First Agency employee hired Coyote Dam completed Matching Funds Program available to property owners for repair costs from 1955 floods Flood control zones proposed – to be activated by voter approval	Wohler Collector built Santa Rosa aqueduct built Water delivery commences		
1960s County Population 147,375	Five water diversion structures built Central Sonoma Watershed Project Preliminary construction of Warm Springs Dam	Petaluma, Forestville and Sonoma aqueducts completed	Informal consultations with Corps of Engineers, U.S. Fish & Wildlife and Fish & Game Re: water quality of the Russian River	
1970s County Population 204,885	Completed construction of Spring Lake Park Various storm drains and channels constructed in the Santa Rosa Plain, Sonoma Valley, and Petaluma River Basin	Water Supply Agreement signed Cotati Intertie completed Emergency wells drilled	Agency hired first environmental specialist	
1980s County Population 299,681	Warm Springs Dam completed	Lake Sonoma began storing water	Agency launched urban water conservation program First Urban Water Management Plan State Water Resources Board Decision 1610: Releases from Lake Sonoma & Lake Mendocino revised	
1990s County Population 388,222		Water Supply and Transmission System project approved to expand water supplies	Developed comprehensive Water Education program Established a Fisheries Enhancement Program, and Natural Resources and Endangered Species Act Compliance Sections Listing of coho & chinook salmon & steelhead trout as threatened under Endangered Species Act Russian River Action Plan Pacific Coastal Salmonid Initiative Russian River Symposium Adopted specific Water Conservation Plan	Assumed responsibility for managing eleven sanitation zones and districts Began to evaluate potential for recycled water in irrigation

General Managers

Randy Poole (1995-present)
Robert Beach (1980-1994)
Richard Norton (1979-1980)
Gordon Miller (1957-1979)
Orval Woodard (1956-1957)
Paul Nichols (1952-1956)

Board of Directors

Michael Cale, 1st District
Mike Kerns, 2nd District
Tim Smith, 3rd District
Paul Kelley, 4th District
Mike Reilly, 5th District

The Structure of the Agency

The Sonoma County Water Agency has a staff of over 200 professionals with a broad range of skills, all of whom work together to provide for the water supply, flood control, and sanitation needs of Sonoma County residents. The Agency is organized into five divisions under the direction of the General Manager: Operations, Engineering and Resource Planning, Environmental Resources and Public Affairs, and Administrative Services.

The water supply pumping facilities, transmission system, flood control structures, and sanitation treatment facilities are maintained and operated by staff within the **Operations and Maintenance Divisions**. Personnel are proficient in the engineering, electrical, mechanical, computer, and electronic skills needed not only for routine maintenance but also for major repairs designed to deliver maximum operational efficiency. Our staff also conduct water quality testing and provide for compliance with federal, state, and local permit requirements. Operations staff conduct industrial waste inspections within the sanitation districts and zones managed by the Agency, and work with local businesses to encourage best management practices.

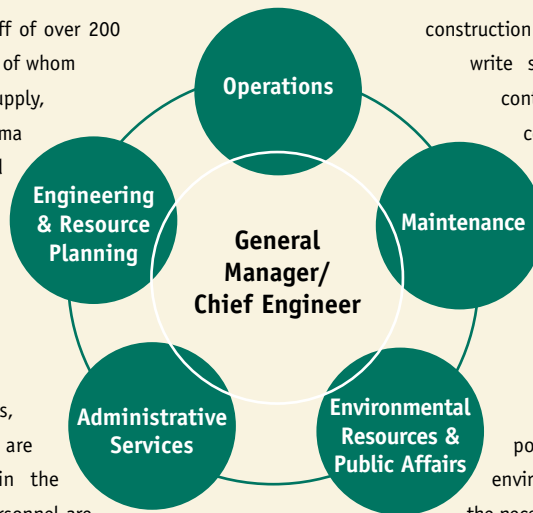
Staff within the **Engineering and Resource Planning Division** plan, design, and construct projects to improve or expand the Agency's water supply, flood control, and sanitation systems. Civil, electrical, and mechanical engineers design and draft specifications for projects, and drafting personnel produce construction plans, maps, and other support materials. Agency staff also conduct surveys of construction sites, obtain right-of-way from property owners, inspect ongoing

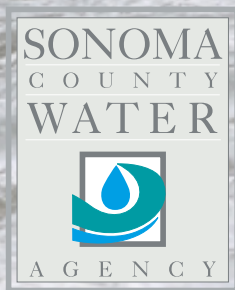
construction projects, finalize construction contracts, write specifications, and administer consultant contracts. Technical support for the Agency's computer and telemetry systems also falls to Engineering and Resource Planning staff members.

Environmental Resources and Public Affairs staff come from a broad range of backgrounds and disciplines, including biology, conservation, botany, fisheries and wildlife, herpetology, resource management and environmental policy. Staff members evaluate the environmental effects of Agency projects, prepare the necessary documentation, and ensure compliance with federal, state, and local environmental regulations.

Staff members also design and implement restoration projects with assistance from the Operations Division. Water conservation personnel assist the water contractors with a wide variety of water conservation programs. Public Affairs personnel provide education, facilitate communication between the Agency and the community, and coordinate outreach and advocacy efforts with legislators to monitor federal, state, and local legislation affecting the Agency.

The **Administrative Services Division** is staffed by professionals skilled in accounting, budget preparation and analysis, payroll management, clerical services, and personnel safety who administer the Agency's financial and business affairs. Partial funding for the Agency's projects and programs is arranged through grant and loan applications prepared by Administrative Services staff.





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